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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/022,022	12/13/2001	Peter V. Boesen	P05419USD	2798
22885 7590 04/29/2010 MCKEE, VOORHEES & SEASE, P.L.C. 801 GRAND AVENUE SUITE 3200 DES MOINES, IA 50309-2721				
EXAMINER ARMSTRONG, ANGELA A				
ART UNIT 2626		PAPER NUMBER		
NOTIFICATION DATE 04/29/2010		DELIVERY MODE ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patatty@ipmvs.com

Office Action Summary

Application No.

10/022,022

Applicant(s)

BOESEN, PETER V.

Examiner

ANGELA A. ARMSTRONG

Art Unit

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 March 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 and 21-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 and 21-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/GS/US)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(c), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(c) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 1, 2010, has been entered.

Claims 1-13 and 21-25 are pending.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 1-13 and 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee (US 2002/0010590) in view of Bybee (EP 1017 252 A2)
3. Regarding claims 1, 2, 4-5, 8-9, 11-13, and 21-24, Lee teaches a method of voice communication comprising: selecting one of a plurality of microphones to detect a selected voice communication by a person other than the user (paragraphs 0023-0024, since the external microphone 101b is input to the recognizer); receiving a selected voice communication of a first language from the selected microphones (paragraph 0023); translating the selected voice communication from the first language to a second language by an intelligent control (113a), the second language different from the first to create a translated voice communication (paragraph

0025); transmitting communications using transmitters (paragraphs 0052-0065); and transducing the translated voice communication at a speaker (paragraph 0024).

Lee does not teach the earpiece having a housing in which the earpiece is adapted for being worn by the user. Bybee discloses a hearing aid system includes an earpiece for producing sound representative of a listening environment, implementing a module worn in wireless communication with the earpiece, a plurality of microphones to receive incoming sound signals from the listening environment, such that circuitry in the module analyzes the incoming sound signals received by the plurality of microphones and generates control signals to govern the production of sound by the earpiece (paragraphs [0006-0011; 0013-0016; 0022-0026]). It would have been obvious to one of ordinary skill at the time of the invention to modify the system of Lee to provide an earpiece housing adapted for being worn by a user, as suggested by Bybee, for the purpose of providing a portable convenient unit to the user.

Lee does not teach a plurality of microphones to detect a selected voice communication by a person other than the user. However, it was well known to provide a plurality of microphones in a communication system, for the purpose of providing improved signal processing via background noise reduction and desired signal enhancement. Bybee discloses a hearing aid system includes an earpiece for producing sound representative of a listening environment, implementing a module worn in wireless communication with the earpiece, a plurality of microphones to receive incoming sound signals from the listening environment, such that circuitry in the module analyzes the incoming sound signals received by the plurality of microphones and generates control signals to govern the production of sound by the earpiece (paragraphs [0006-0011; 0013-0016; 0022-0026]). It would have been obvious to one of

ordinary skill at the time of the invention to modify the system of Lee to provide an earpiece having a plurality of microphones, as was well known in the art, for the purpose achieving improved signal processing and signal enhancement.

4. Regarding claim 3, Lee teaches transmitting the voice communication of a first language to a translation station and receiving the translated voice communication from the translation station (paragraphs 60-61).
5. Regarding claim 6, Lee teaches the second language is English (paragraph 61).
6. Regarding claim 7, Lee teaches first language is English and the second language is different from the first language (paragraph 62).

Response to Arguments

7. Applicant's arguments filed March 1, 2010, have been fully considered but they are not persuasive. Applicant argues neither Lee nor Bybee alone or in combination teach the earpiece housing containing the at least one microphone as claimed. Applicant argues neither Lee nor Bybee alone or in combination teaches a device which contains microphones within an earpiece which is worn on a head of a user. In response, the Examiner argues Bybee (Figure 5; paragraph 13) specifically teaches an earpiece in which incoming sound signals are received by directional and omni-directional microphones and specifically teaches "in an alternative embodiment, only one of directional microphone 23a and omni-directional microphone 23b is provided in earpiece 12."

Applicant argues neither reference shows an earpiece providing voice translation. In response, the Examiner argues Lee specifically teaches a language independent voice

communication system which implements a headset with an earphone. Lee does not teach the earpiece having a housing in which the earpiece is adapted for being worn by the user. However, providing an earpiece with a housing in which the earpiece is adapted for being worn by the user was well known in the art. Bybee discloses a hearing aid system includes an earpiece for producing sound representative of a listening environment, implementing a module worn in wireless communication with the earpiece, a plurality of microphones to receive incoming sound signals from the listening environment, such that circuitry in the module analyzes the incoming sound signals received by the plurality of microphones and generates control signals to govern the production of sound by the earpiece. One of ordinary skill in the art could have substituted one known element for another, and the results of the substitution would have been predictable and would have recognized the advantages of modifying the system of Lee to provide an earpiece housing adapted for being worn by a user, as suggested by Bybee, for the purpose of providing a portable convenient unit to the user.

Applicant argues Bybee provides microphones are in the module worn by the user and not in the earpiece, and thus teaches away from the claimed invention. In response, the Examiner argues the system may additionally teach other microphones are in the module worn by the user, one of ordinary skill in the art would additionally be able to recognize, as Bybee also recognized, the advantages of providing microphones in the earpiece unit.

With respect to claim 1, Applicant argues neither Lee nor Bybee alone or in combination teaches “providing an earpiece having a housing and a plurality of microphones within the earpiece housing, the earpiece adapted for being worn by a user.” With respect to claim 1, Applicant argues neither Lee nor Bybee alone or in combination teaches “selecting at least one

of the plurality of microphones within the housing of the earpiece to detect a selected voice communication by a person other than the user.” With respect to claim 12, Applicant argues neither Lee nor Bybee alone or in combination teaches “providing an earpiece having a housing and having at least one microphone within the housing and a speaker within the housing, the earpiece adapted for being worn on a user’s head.” With respect to claim 13, Applicant argues neither Lee nor Bybee alone or in combination teaches, “providing an earpiece having a housing and having a plurality of microphones with the housing, the earpiece adapted for being worn by a user.” With respect to claim 21, Applicant argues neither Lee nor Bybee alone or in combination teaches “providing a nonocclusive earpiece housing and having a plurality of inputs for receiving voice communication and a speaker, the nonocclusive earpiece housing adapted for being worn by a user on the user’s head.” With respect to claim 25, Applicant argues neither Lee nor Bybee alone or in combination teaches, “providing an earpiece having a housing and a plurality of microphones within the earpiece housing, the earpiece adapted for being worn by a user on a head of the user.”

In response, the Examiner argues Lee specifically teaches a language independent voice communication system which implements a headset with an earphone. Lee does not teach the earpiece having a housing in which the earpiece is adapted for being worn by the user. However, providing an earpiece with a housing in which the earpiece is adapted for being worn by the user was well known in the art. Bybee discloses a hearing aid system includes an earpiece for producing sound representative of a listening environment, implementing a module worn in wireless communication with the earpiece, a plurality of microphones to receive incoming sound signals from the listening environment, such that circuitry in the module analyzes the incoming

sound signals received by the plurality of microphones and generates control signals to govern the production of sound by the earpiece. One of ordinary skill in the art could have substituted one known element for another, and the results of the substitution would have been predictable. One of ordinary skill would have also recognized the advantages of modifying the system of Lee to provide an earpiece housing adapted for being worn by a user, as suggested by Bybee, for the purpose of providing a portable convenient unit to the user.

Lee does not teach a plurality of microphones to detect a selected voice communication by a person other than the user. However, it was well known to provide a plurality of microphones in a communication system, for the purpose of providing improved signal processing via background noise reduction and desired signal enhancement, as indicated by Bybee. One of ordinary skill in the art could have applied the known plurality of microphone techniques to the device of Lee and the results would have been predictable to one of ordinary skill in the art. One of ordinary skill would have also recognized the advantages of modifying the system of Lee to provide an earpiece having a plurality of microphones, as was well known in the art, for the purpose achieving improved signal processing and signal enhancement.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANGELA A. ARMSTRONG whose telephone number is (571)272-7598. The examiner can normally be reached on Monday-Thursday 11:30-8:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richmond Dorvil can be reached on 571-272-7602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Angela A Armstrong/
Primary Examiner, Art Unit 2626